OFP Rec'd PCTIPTO 05 APR 2006

PTO-1390

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

APR 0 5 2006

ATTORNEY DOCKET NUMBER

8009-88051

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/567,102

PCT/EP2004/008419

INTERNATIONAL FILING DA July 29, 2004 PRIORITY DATE CLAIMED August 8, 2003

TITLE OF INVENTION

HEAT MANAGEMENT FOR AN INTERNAL COMBUSTION ENGINE

APPLICANT(S) FOR DO/EO/US Hans BRAUN et al.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- 1. \Box This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
- 2.

 This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.
- 3.

 This express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. Please do not delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
- 4. D The US has been elected (Article 31).
- 5.

 A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. 📮 is attached hereto (required only if not communicated by the International Bureau).
 - b. ... has been communicated by the International Bureau.
 - c. Dis not required, as the application was filed in the United States Receiving Office (RO/US).
- 6. D An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. 🛚 is attached hereto.
 - b. phas been previously submitted under 35 U.S.C. 154(d)(4).
- 7. 😀 Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
 - a. 📮 are attached hereto (required only if not communicated by the International Bureau).
 - b. D have been communicated by the International Bureau.

 - d. D have not been made and will not be made.
- 8. D An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
- 9.

 An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
- 10.
 An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 20. below concern document(s) or information included:

- 11. D An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
- 12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
- 13. 🚊 A preliminary amendment.
- 14.

 An Application Data Sheet under 37 CFR 1.76.
- 15.

 A substitute specification.
- 16.

 A power of attorney and/or change of address letter.
- 17.

 A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.
- 18.

 A second copy of the published international application under 35 U.S.C. 154(d)(4).
- 19. p A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
- 20. Ø Other items or information: return receipt postcard

21. © Basic national fee (37 CFR 1.492(a)) \$300.00 \$0.00 \$0.00 \$0.00 \$1.	U.S. APPLICATION NO, (if a 10/567, 102	known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO. PCT/EP2004/007017				ATTORNEY DOCKET NUMBER 8009-88051		
22. G. Examination tel (37 CFR 1.492(c)) If the Written Opinion prepared by ISA/US or the International Preliminary Examination Report prepared by ISA/US or the International Preliminary Examination Report prepared by ISA/US or the International Preliminary Examination Report prepared by ISA/US or the International Preliminary Examination Report prepared by ISA/US or the International Preliminary Examination Report prepared by ISA/US or the International Preliminary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the International Examinary Examination Report Prepared by ISA/US or the Internationa	The following fees are	submitted:	,					Calculations	PTO use onl	
22. D Examination fee (37 CFR 1.492(c)) If the Written Opinion prepared by ISA/US or the International Preliminary Examination Report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$ 0.00 23. D Search fee (37 CFR 1.492(b)) If the Written Opinion or the ISA/US or the International Preliminary Examination Report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$ 0.00 25. D Search fee (37 CFR 1.492(b)) If the Written Opinion of the ISA/US or the International Preliminary Examination Report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$ 0.00 Search fee (37 CFR 1.492(b)) If the Written Opinion of the ISA/US or the International Preliminary Examination Report prepared by PEA/US indicates all claims satisfy provided to the Office or previously communicated to the US and provided to the Office or previously communicated to the US by the IB 40.00 All other situations 3500.00 TOTAL OF 21, 22 and 23 = \$0.00 Additional fee for specificiation and drawings filed in paper over 100 sheets (excluding sequence disting or computer program listing filed in an electronic medium). The fee is \$250 for each additional So sheets of paper or fraction thereon additional So sheets of paper or fraction thereon for the search of the South S	•		92(a)) :	\$300.00			Γ	\$0.00		
Search fee (37 CFR 1.492(b)) If the Written Opinion of the ISA/US or the International Preliminary Examination Report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$ 0.00	If the Written Op Examination provisions o	pinion prepared by I Report prepared by f PCT Article 33(1)-	SA/US or ti / IPEA/US i	ndicates all claims sa						
If the Written Opinion of the ISA/US or the International Preliminary Examination Report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-4(4) \$ 0.00								\$0.00		
TOTAL OF 21. 22 and 23 = \$0.00 Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence additional 50 sheets of paper or fraction thereof. Total Sheets	If the Written Opinion of the ISA/US or the International Preliminary Examination Report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$ 0.00 Search fee (37 CFR 1.445(a)(2) has been paid on the international application to the USPTO as an International Searching Authority \$100.00 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB \$400.00							\$0.00		
Additional fee for specification and drawings filled in paper over 100 sheets (excluding sequence disting or computer program listing filled in a electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. Total Sheets Extra Sheets Extra Sheets Extra Sheets Extra Sheets Extra Sheets Extra Sheets Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)). CLAIMS NUMBER FILED NUMBER EXTRA RATE Total claims 19 0 = 0 X \$50.00 \$0.00 Independent Claims 19 0 = 0 X \$50.00 \$0.00 Independent Claims 2 0 X \$50.00 \$0.00 Independent Claims 2 0 X \$50.00 \$0.00 Independent Claims 5 X \$0.00 \$0.00 Independent Claims 2 3 X \$0.00 \$0.00 Independent Claims X \$0.00 \$0.00 In			=			 		\$0.00		
If tour dup to whole number If tour dup tour date (37 CFR 1.492(e)). If tour date (37 CFR 1.492(Additional fee for listing or compute additional 50 sheet	specification and draw r program listing filed ets of paper or fraction	ings filed in in an electron thereof. Number of e	nic medium). The fee is each additional 50		0 for each				
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)). Total claims 19		Extra emotio	(round up to	whole number			_			
trom the earliest claimed priority date (37 CFR 1.492(a)). CLAIMS NUMBER FILED NUMBER FILED NUMBER EXTRA RATE Total claims 19 0 = 0 × \$50.00 \$0.00 Independent Claims 2 - 3 = 0 × \$200.00 \$0.00 MULTIPLE DEPENDENT CLAIM(S) (if applicable) Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by half. \$0.00 Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by half. \$0.00 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). \$ to the earliest claimed priority date (37 CFR 1.492(i)). \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$							00	\$0.00		
CLAIMS Total claims 19 2 0 80.00 Independent Claims 2 3 0 X \$50.00 \$0.00 MULTIPLE DEPENDENT CLAIM(S) (if applicable) ADDICATED STATE TOTAL OF ABOVE CALCULATIONS ADDICATE Claims Small entity status. See 37 CFR 1.27. Fees above are reduced by half. \$0.00 ADDICATED STATE \$0.00 ADDICATED STATE \$0.00 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(ii)). \$0.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. \$0.00 Amount to be refunded: \$ Amount to be charged: \$170.00 \$10/2006 GFREY1 00000161 061135 10567102 FEC:1617 A check \$30.00 mBut of \$ to cover the above fees is enclosed. By Please charge my Deposit Account No. 06-1135 in the amount of \$ 170.00 to cover the above fees. A duplicate copy of this sheet is enclosed. C. So The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A.	Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).							\$130.00		
Total claims 19						RAT	E			
MULTIPLE DEPENDENT CLAIM(S) (if applicable) SO.00 MULTIPLE DEPENDENT CLAIM(S) (if applicable) SUBTOTAL SAID (MULTIPLE) SO.00 MULTIPLE DEPENDENT CLAIM(S) (if applicable) SUBTOTAL SAID (MULTIPLE) SUBTOTAL SAID (MULTIPLE) SO.00 Amount to be charged: MODITAL FEES ENCLOSED MULTIPLE DEPENDENT CLAIM(S) (if applicable) MODITAL NATIONAL FEE SO.00 Amount to be charged: MODITAL FEES ENCLOSED MODI	Total claims	19			×			\$0.00		
### TOTAL OF ABOVE CALCULATIONS = \$0.00	Independent Claims	2		0	×	\$200.	00	\$0.00		
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by half. \$130.00 SUBTOTAL = \$130.00 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). \$107AL NATIONAL FEE = \$0.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. \$10,000 Amount to be refunded: \$ Amount to be charged: \$170.00 \$ \$10/2006 GFREY1 00000161 061135 10567102 \$2.1617 A check \$130.00 Problem of \$ to cover the above fees is enclosed. \$2.26. Please charge my Deposit Account No. 06-1135 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. \$3.27. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. **NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. **SEND ALL CORRESPONDENCE TO:** FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A. **NAME**	MULTIPLE DEPENDEN	IT CLAIM(S) (if app	licable)			\$360.	00	\$ `		
SUBTOTAL = \$130.00 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). \$	TOTAL OF ABOVE CALCULATIONS =							\$0.00		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(ii)). **TOTAL NATIONAL FEE = \$0.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. \$40.00 **TOTAL FEES ENCLOSED = \$0.00 **Amount to be refunded: \$ **Amount to be charged: \$170.00 \$ **EC:16:7 A check i:30.00 mBunt of \$ to cover the above fees is enclosed. **B. Please charge my Deposit Account No. 06-1135 in the amount of \$ 170.00 to cover the above fees. A duplicate copy of this sheet is enclosed. **C. **The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. **NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. **SEND ALL CORRESPONDENCE TO:** **FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A.* **NOTE: Whorman N. Kunitz Norman	☐ Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by half.							\$0.00		
from the earliest claimed priority date (37 CFR 1.492(i)). **TOTAL NATIONAL FEE = \$0.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. \$40.00 **TOTAL FEES ENCLOSED = \$0.00 Amount to be refunded: \$ Amount to be charged: \$170.00 \$ **EC:1617 A check i330-04000 to cover the above fees is enclosed. **B. Please charge my Deposit Account No. 06-1135 in the amount of \$170.00 to cover the above fees. A duplicate copy of this sheet is enclosed. **C. **The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. **NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. **SEND ALL CORRESPONDENCE TO:** **FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A.** **NAME**	SUBTOTAL =							\$130.00		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. **No.00 **TOTAL FEES ENCLOSED = \$0.00 **Amount to be refunded: \$ **Amount to be charged: \$170.00 \$ **EC:16:17 A check in 30.00 and bunt of \$ to cover the above fees is enclosed. **Believe to the enclosed of this sheet is enclosed.** **Description of the enclosed of this sheet is enclosed.** **To cover the above fees is enclosed.** **Description of the enclosed of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **Description of the enclosed of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees. A duplicate copy of this sheet is enclosed.** **To cover the above fees is enclosed.** **To cover the abov	•	-	-		30	months		\$		
### SEND ALL CORRESPONDENCE TO: ### TOTAL FEES ENCLOSED ### 10/2006 GFREY1 00000161 061135 10567102 ### 10/2006 GFREY1 00000161 061135 ### 10/2006 GFREY1 00000161 061135 ### 10/2006 GFREY1 0000016								\$0.00		
## \$0.00 Amount to be refunded: \$ Amount to be charged: \$170.00 \$								\$40.00		
Amount to be refunded: \$ Amount to be charged: \$170.00 \$ EC:16:17 A check i-30-00 mbunt of \$ to cover the above fees is enclosed. b. Please charge my Deposit Account No. 06-1135 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A.										
Amount to be charged: \$170.00 \$ EC:16:17 A check i-30.00 m/Dunt of \$ to cover the above fees is enclosed. b. Please charge my Deposit Account No. 06-1135 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A.								Amount to	Ł	
b. Please charge my Deposit Account No. 06-1135 in the amount of \$ 170.00 to cover the above fees. A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A.	/10/2006 GFREY1 00000161 061135 10567102							Amount to be charged:	\$	
b. Please charge my Deposit Account No. 06-1135 in the amount of \$ 170.00 to cover the above fees. A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1135. A duplicate copy of this sheet is enclosed. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A.	FC:1617 A check 13	De Dan Daunt of \$	to cove	r the above fees is er	clos	ed.			\ 	
must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A. SIGNATURE Norman N. Kunitz NAME	b. 👳 Please charduplicate co	ge my Deposit Acco ppy of this sheet is ssioner is hereby au	ount No. 06 enclosed. othorized to	-1135 in the amount charge any additiona	of \$	170.0	nay be r	equired, or credit		
FITCH, EVEN, TABIN & FLANNERY P.O. Box 65973 Washington, DC 20035 U.S.A. NAME							ition to	revive (37 CFR 1	.137(a) or (b))	
P.O. Box 65973 Washington, DC 20035 U.S.A. NAME NAME	SEND ALL CORRESPO	ONDENCE TO:				///u		111 11/	1	
	P.O. Box 65973	3			sid		ı N. Kuı	nitz	V	
					NAI	ME				

REGISTRATION NUMBER

20,586

Telephone: (202) 577-7000 Facsimile: (202) 577-7007